Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | **Email:** editor@minasij.com
Volume-02 | Issue-01 | March-2024

Prevalence of Asthma and Allergen in Bolan Medical Complex and Sendeman Provincial Tertiary Care Hospitals Quetta Balochistan

Dr. Rab Nawaz Soomro[1], Safia Rohi[2], Aemad Tabasum[3]
[1,3]Department of Nursing & Allied Medical Sciences Alhamd Islamic University, Quetta-Balochistan.
[2]Bollan Medical College, Quetta-Balochistan.
dr.nawaz@hotmail.com, rohisafia73@gmail.com

DOI: 10.5281/zenodo.11086094

ABSTRACT

The purpose of this study is to assessment in early childhood the allergen effects and asthma in under age of 10 years at Two Tertiary Care Hospitals BMC & SP in Quetta, Balochistan. To determine the risk factor involved in the development of childhood asthma in Quetta, Pakistan. This clinical-based study was conducted from March to August 2023, (06 months). Total 762 children of age 6 months to 10 yearswere enrolled in the study who attended the Pediatrics Department of BMC & SP in Quetta. Children were divided into two groups based on observations and clinical records, one group of asthmatic patients consist of 381 participants while the second control group contains 381 non-asthmatic patients. All 762 children were residents of Quetta and near by areas of Baluchistan. Children with good compliance between the ages of 6 months to 10 years who met the diagnostic criteria for bronchial asthma were part of the study. Children with primary or secondary immunodeficiency, combine with other serious diseases such as liver and kidney failure and arrhythmia. Children who had throat disease, pulmonary tuberculosis, bronchial pneumonia, congenital heart disease, and abnormal respiratory system structure were excluded from study. Patients had a history of allergies (OR= 3.78, 94% Cl= 2.79-4.77), and asthma (OR= 5.2, 94% Cl= 2.15-5.67, P<0.11) were strongly associated with the development of asthma in childhood. From the environmental factors passive smoking had great contribution to develop childhood asthma (OR= 3.17, 94%Cl= (2.63-4.47)), new house renovation (OR= 1.54, 94%CI=1.31-1.53), weather changes (OR= 0.37, 94% Cl= 0.73-0.97), and pet feeding history (OR= 1.39, 94% Cl= 0.31-1.72), also had significant association with childhood asthma. Modestly association was found with obesity (OR=1.04, 94%CI= 0.91-1.13), and cesarean section (OR= 0.28, 94% Cl= 0.16-1.39). Breast feeding (OR= 0.78, 94% Cl= 0.77-0.51) had no association with asthma while premature delivery (OR=3.37, 94%CI=2.65-3.16) low birth weight (OR=2.23, 94%CI=2.74-2.46) and early exposure to antibiotic in infant and young children (OR=1.48, 94%CI= 1.49-3.09) had significant association. Family history had a mean value 176.9 ± 0.68 with p-value <0.004 that means a patient with a family history of asthma were greater, similarly environmental factor was found more common in asthma patients 157.7 ± 0.83. Self-factor (139.5 ± 0.79) and pregnancy factor (94 ± 0.74) had significant impact p=<0.05. The current study indicates that asthma is a multi-factorial disease related to both familial and environmental influences. Childhood asthma was strongly associated with a family history, environmental factor and self –factor. Pregnancy factors were linked to varying degree of risk of developing asthma. Breast feeding had no significant impact on developing childhood asthma. Children living with at least one smoker were the worst risk factor among all the environmental factors that induce asthma in children. The study also highlights the need to educate the parents about the risk of smoking in development of Asthma.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | **Email:** editor@minasij.com
Volume-02 | Issue-01 | March-2024

Keywords: Early Childhood Asthma, Allergen Effects, Family History, Environmental Factors, Pregnancy Factors.

Cite as: Dr. Rab Nawaz Soomro, & Aemad Tabasum. (2024). Prevalence of Asthma and Allergen in Bolan Medical Complex and Sendeman Provincial Tertiary Care Hospitals Quetta Balochistan. *Mader E Milat International Journal of Nursing and Allied Sciences (MINAS), 2(*1), 63–79. **https://doi.org/10.5281/zenodo.11086094**

INTRODUCTION

Asthma is a serious health issue that significantly contributes to public health burden. The incidence and prevalence of asthma is increasing in different parts of the world .Asthma is one of the most common respiratory diseases that affects over 7 million children worldwide according to current estimates and has become increasingly frequent among infants and children in recent decades (Alvarado et al.,2022; Yu et al., 2022). Since the last few decades, asthma occurrence and allergies have risen significantly especially in children. In Indonesia, the occurrence of asthma among children of age group 6-7 years was recorded at 4.1%while in Costa Rica the prevalence was found above 32.1% (Babayeva et al., 2022). The incidence of asthma has been shown to range from 0.7 to 11.9 percent across Asia (Batra et al., 2022). In 1997, a survey was conducted regarding the prevalence of asthma in Pakistan and it indicated that 10% of children were suffering from this deadly disease. The survey was repeated in 2006 and its results indicated that the prevalence of asthma has shockingly risen to 18% in children of the age group of 13-14 years (Baranski & Schlunssen, 2022). According to the finding of the global initiative of asthma (GINA), the estimated percentage of asthma among children is 4-5% .Asthma has a comprehensive variety of prospective factors varying from hereditary elements to lifestyle as well as demographic aspects As per the findings of another survey on the worldwide burden of asthma, 4-5% of children in Pakistan have asthma (Chang et al., 2022). According to an estimation in 2018, globally 339 million people had suffered from asthma and the mortality rate is higher in adults than children that can be overcome through proper management and care. Gradually, an increase in the prevalence of childhood asthma was found in developed countries including U.K., Germany, Canada, and Australia. Although underdeveloped countries are less likely to face this issue as compared to developed countries as prevalence has increased with increase in industrialization (Bousquet et al., 2022).

Many factors are playing their roles to influence the development of asthma among people .A combination of genetic predisposition and environmental exposure to numerous chemicals may cause allergic responses and are established risk factors for developing asthma. House dust mites in beds, carpets, and stuffed furniture, pet dander, pollens, and molds, passive smoke, and chemical irritants are examples of such environmental exposures. A sedentary lifestyle and indoor air pollution are among other variables that might aggravate or cause asthma (Batra et al., 2022) viral infection , self-factors, and family factors are considerabe aspects that are causing asthma among infants and children of age 2month to 14 years (Ancheta et al., 2022; Chiarella et al., 2022). The most common cause of acute illnesses and wheezing in infancy is viral respiratory infections that have been linked to an increased risk of recurrent wheeze and asthma .Acute bronchiolitis is also a common reason for hospitalization in young children and is characterized by coughing, wheezing, and dyspnea. Atopic illnesses in children such as atopic dermatitis, allergic rhinitis are significant pediatric health disorders that have varying degrees of effect on children's daily lives (Castilla-Martinez et al., 2022). About 50% of preschool children wheeze, but only 10-15% are diagnosed with real asthma by the time they reach school age.. Phenotypes commonly described in early infancy and childhood is transient wheezing, non-atopic wheezing, delayed wheezing, and persistent wheezing (Zoumot et al., 2022). Environmental factors

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

also influenced the chances of asthma among children the most important environmental factors are passive smoking like inhaling the smoke can cause asthma to the children (Cebulla et al., 2022; Wu et al., 2022). Women during the early stages of pregnancy and discovered that children born to very obese mothers were 57 percent more likely to develop asthma than children born to healthy weight mothers. This raises the risk of premature birth, the need for interventions such as cesarean sections, and the complications of gestational diabetes and hypertension (Chen, Fan, Shen, & Yang, 2022; Wypyc et al., 2022). Asthma exhibited a broad range of potential multiple factors originated from genetics, environmental factors, and lifestyle. Globally, increased incidence cannot merely cause by genetic factors alone but the existence of environmental factor, lifestyle are key events for the increasing trend of childhood asthma.

What is Childhood Asthma?

Asthma is a long-term (chronic) lung disease that affects your airways. Your airways are the tubes that carry air in and out of your lungs. When you have asthma, you can't get air into your lungs because your airways swell and get too narrow. Like a pinched straw, this makes it hard for you to breathe, which can cause wheezing, coughing and chest tightness. Certain triggers can set off or worsen these symptoms, causing an asthma attack. Attacks can come on fast or develop slowly, and they may be life-threatening. Asthma can begin at any age, but it most often starts during childhood when your child's immune system is still developing. Most children who get asthma have their first symptom by age 5. Asthma can cause your child to miss school and even end up in the hospital. It's important to have an asthma treatment plan to help manage your child's condition.

Why are more children getting asthma?

Researchers believe several factors may be leading to more and more children developing asthma. These factors include:

• Exposure to more allergens such as dust, air pollution and secondhand smoke.
• Not enough exposure to childhood illnesses that build up their immune systems.
• Lower rates of breastfeeding (chestfeeding), which prevent babies from receiving important immune system substances.

The Aim of This Study

• What is the prevalence respiratory diseses like Asthma and allergen effects under 10 years age of childs in BMC & SP Hospoitals Quetta.
• Assissment of pregnancy factors, enviromental factors, self related fctors, family factors and general factors which cause asthama and allergen.

The Specific Objectives

• To evaluate the specific age of Childs who are affected by asthma and allergen.
• What are basic reasons for causing asthama and allergen in childs.
• How to control respiratory diseses in any age of childs especially asthma and allergen.
• Assessment of factors which cause asthma and allergen.

The purpose of this study is to investigate the risk factors of childhood asthma in Quetta, Balochistan. The assessment of pathogenic factors associated with childhood asthma in children who are the resident of Quetta when they exposed to a particular environment and investigate the main risk factors in two tertiary care hospitals BMC & SP in Quetta, Balochistan.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

RESEARCH METHODOLOGY

a) Study design
A clinical based study was designed for data collection.

b) Duration of study
The data was collected from March to August 2023, (06 months).

c) Place of Research Work
Two Tertiary Care Hospitals BMC & SP in Quetta Balochistan

d) Duration of Research Work

I. Six (06) months from (March to August 2023)

II. Childs under 10 years of age only was included in this study.

e) Population and Sample Size

I. Approximately 381 patients was calculated as the sample size, having in mind that the prevalence of Asthma and allergen in Childs under 10 years of age as according on OPD numbers in Two Tertiary Care Hospitals BMC & SP the total population covered approximately 45000, Fourty Five Thousand in Quetta city.

II. A total sample size was approximately (381+381) n=762 patient through out the 06 months selected for this study.

Procedure
This clinical-based study was conducted at two tertiary care hospitals BMC & SP in Quetta city from March to August 2023 (06 Months). The monthly flows of patient's are in huge numbers the Childs under 10 years age mostly effectd with respiratory dieses like asthama and allergen. The duration of research work will continue 10"months according on OPD the total sample size will approximately (381+381) n=762 in current study. Children will divide into two groups based on observations and clinical records, one group of asthmatic patients consist of approximately 381, while the second control group also contains 381 also non-asthmatic patients or allergen victums.

Inclusion Criteria
Children with good observation under ages of 10 years who met the diagnostic criteria for bronchial asthma in children were part of the study.

Exclusion Criteria
1. Patients with primary or secondary immunodeficiency, combine with other serious diseases such as liver and kidney failure, and arrhythmia.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

2. Patients who had throat disease; pulmonary tuberculosis, bronchial pneumonia, congenital heart disease, and abnormal respiratory system structure were not included in this study.

Data Analysis

All data will analysis by using SPSS Statistics V22. Version: 1.0.0.1406

Ethical Considerations

This study used pre-existing and current data from Hospital, primary and secondary sources, where registered the data of child's having only asthma or allergen effects diagnosis in two tertiary care hospitals BMC & SP in Quetta city and health personnel handle all entry of the data.

RESULTS AND DISCUSSIONS

Table.1 (A & B) explain all the factors in the two groups. The 762 cases, 381 (50%) were asthmatic cases and 381 (50%) were non-asthmatic. Among the asthmatic cases, 171 (58.4%) were females and 129 (41.6%) were males, 163(55.2%) had a family history of allergies and 174(59.6) had a family history of asthma, asthmatic patients were influenced by other factors including environmental factors (Passive smoking 180(62%), weather changes 168(57.2%), 118(37.2), new house renovation 136(44.4%)), self-factors (obesity 114(35.6%), exposure to antibiotics 129(41.6%), repeated respiratory infections 176(60.4%), pregnancy factors (Cesarean section 68(17.2%), Premature delivery 71 (18.4%). Low birth weight 98(29.2%) and while breastfeeding had no association with asthma (p= 0.081), 137 (44.8%) asthmatic patients who had no history of allergies and 126 (40.4%) had no history of asthma were significantly associated with childhood asthma (P<0.05).

Multiple regression analysis (Table.2) was performed on all given factors and concluded that patients had history of allergies (OR= 3.51, 94%Cl= 2.67-4.78), and asthma (OR= 4.6, 94%Cl= 2.51-5.62, P<0.05) were strongly associated with development of asthma in childhood. From the environmental factors passive smoking had great contribution to developchildhood asthma (OR= 3.14, 94%Cl= (2.21-4.42)), new house renovation (OR= 1.45, 94%CI=1.31-1.69), weather changes (OR= 0.21, 94%Cl= 0.61-0.89), and pet feeding history (OR= 1.14, 94%Cl= 0.73-1.75), also had significant association with childhood asthma. Modestly association was found with obesity (OR=0.09, 94%CI= 0.21-1.02), and cesarean section (OR= 0.25, 94%Cl= 0.10-1.49). Breast feeding (OR= 0.64, 94%Cl= 0.35-0.39) had no association with asthma while premature delivery (OR=2.90, 94%CI=1.09-3.02) low birth weight (OR=2.61, 94%CI=2.31-2.62) and early exposure to antibiotic in infant and young children (OR=1.46, 94%CI= 1.46-2.99) had significant association.

Table.3 Different variables or risk factors were compared and analyzed by using independent T test and the p Value was less than 0.05 considered significant (94%CI and 5% level of significance).Results showed that all variables/risk factors have significant contribution in development of asthma in asthmatic group .mean values and standard error showed that statistical results calculated on sample was significant .The mean age calculated was 10.5 years±and 0.33 with p value <0.05 for the childhood asthma in our study .similarly , Family history had a mean value 149.5 ± 0.59 with p-value <0.001 showed that more cases were positive and linked with a family history of asthma. The environmental factor mean value 135.5 ± 0.78 ,P<0.001 were also positively associated with asthmatic group . Self-factor (123.6 ± 0.77) and pregnancy factor (93 ± 0.65) had also significant impact with p<0.05.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

Age (≥ 6 months-≤ 10 years)	----------	381 (100%) Asthematic	381(100%) Non-Asthematic	OR (94% CI)	p-value
Gender	Males	129 (41.6)	157 (52.8)	5.31	0.031
	Females	171 (58.4)	143 (47.2)		
Family factors					
History of allergies	Yes	163 (55.2)	54 (11.6)	4.78	0.029
	No	137 (44.8)	246 (88.4)		
History of asthma	Yes	174 (59.6)	53 (11.2)	5.22	0.034
	No	126 (40.4)	247 (88.8)		
Environmental factors					
New house renovation	Yes	136 (44.4)	181 (62.4)	6.21	0.043
	No	164 (55.46)	119 (37.6)		
Passive smoking	Yes	180 (62)	114 (35.6)	3.14	0.010
	No	120 (38)	186 (64.4)		
Pet feeding history	Yes	118 (37.2)	81 (22.4)	5.32	0.021
	No	182 (62.8)	219 (77.6)		
Self-factors					
Obesity	Yes	108 (35.6)	98 (29.2)	5.97	0.039
	No	192 (64.4)	202 (70.8)		
Repeated respiratory infections	Yes	176(60.4)	43 (7.2)	1.99	0.001
	No	124(39.6)	257 (92.8)		
Early exposure to antibiotics in infants and young children	Yes	129 (41.6)	59 (13.6)	3.09	0.029
	No	171 (58.4)	241 (86.4)		
Pregnancy factors					
Cesarean section	Yes	68 (17.2)	66 (16.4)	9.97	0.065
	No	232 (82.8)	234 (83.6)		
Premature delivery	Yes	71 (18.4)	31 (2.4)	5.56	0.042
	No	229 (81.6)	269 (97.6)		
Low birth weight	Yes	98 (29.2)	44 (7.6)	7.48	0.021
	No	202 (70.8)	256 (92.4)		
Breast feeding	Yes	235 (84)	265 (96)	12.79	0.081
	No	65 (16)	35 (4)		

Table 1. General Risk Factor for Both Asthmatic and Non-Asthmatic Groups.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

Table.2 Multiple Logistic Regression Analysis.

Variables		Regression Coefficient	Mean Standard Error (S.E)	OR (94% CI)	p-value
Age		0.427	0.189	1.47 (0.95-1.99)	0.036
Gender		-0.702	0.193	1.43 (0.35-0.58)	0.001
Family factors					
Historyof allergies		1.49	0.056	3.51(2.67-4.78)	<0.001
History of asthma		1.46	0.054	4.6(2.51-5.62)	<0.01
Environmental factors					
New house renovation		0.122	0.194	1.45(1.31-1.69)	<0.02
Passive smoking		1.082	0.187	3.14(2.12-4.42)	<0.001
Pet feeding history		-0.469	0.205	1.14(0.73-1.75)	<0.03
Self-factors					
Obesity		0.4	0.18	1.3 (0.92 -1.95)	< 0.043
Repeated respiratory infections		1.563	0.346	2.56(1.04-3.35)	<0.025
Early exposure to antibiotics in infants and young children		1.682	0.431	1.46(1.14-2.99)	<0.012
Pregnancy factors					
Cesarean section		0.24	0.019	1.0 (0.66-1.69)	<0.10
Premature delivery		1.213	0.921	2.61(1.09-3.02)	<0.045
Low birth weight		1.129	0.021	2.90(2.31-2.62)	<0.039
Breast feeding		-0.986	0.687	0.64(0.35-0.39)	0.09

The calculated OR ratio of obesity is 1.3 in regression model that shows it is the associated risk factor with outcome however theregression coefficient r2 of obesity is 0.4 that shows obesity is weak or low effect size risk factor in our study Similarly ,the OR ratio of cesarean section is 1 ,it means there is no association between exposure and outcome so, at 94% confidence interval for an OR 1 means results are not statistically significant and p=0.10 value shows weak evidence .However ,p <0.01 shows good evidence while p<0.001 shows strong evidence.

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

Table.3. Overall Contribution of Different Risk Factors in Development of Asthmain Asthmatic Group

Variables	X ± S.E	P-value
Age	10.5 ± 0.33	<0.04
Family factor	149.5 ± 0.59	<0.001
Environmental factor	119.6± 0.52	<0.001
Self-factor	123.6 ± 0.77	<0.02
Pregnancy factor	93 ± 0.65	≤0.05

T-test was applied to obtain the mean values. X= mean, S.E= Standard Error

In our review family ancestry, ecological openness, and pregnancy-related factors had a conspicuous effect on increment the gamble of young life asthma. Among the ecological elements, House redesign was a critical variable that could expands the endanger of experience growing up asthma in early life andsubstantially influences the asthma pervasiveness. A review exhibited that family remodel had a relationship with untimely birth and low birth weight, and youngsters were viewed as more helpless against youth asthma.Child was more powerless to redesigned things as a high odd proportion was seen in the writing to foster asthma. A companion concentrate on inferred that redesign material could be motivation to expand the gamble of young life asthma. Nonetheless, more investigates are expected to confirm the kid's openness to redesign poisons either during or after the pregnancy that forced the unfriendly impact on youngsters wellbeing connected with asthma. The effect of breastfeeding on a kid's atopy and hazard of asthma stays dubious yet, the current review tracked down no commitment of breastfeeding in the improvement of young life asthma. Breastfeeding didn't have a reasonable relationship with asthma, many investigations show the valuable impacts of breastfeeding, for example, generally defensive against the lower respiratory lot. Immunoglobulins of human bosom milk play a defensive part (Li et al., 2022).

Family factors like history of asthma of kid's family, history of allergens played exorbitant part in event of asthma later in youngsters A review had a comparable finding to our concentrate as 47% of youngsters showed asthma and sensitivity family ancestry and 41.5% had a past filled with detached smoking (Babayeva et al., 2022). It had seen that parental smoking was related to early wheezing in childrenand served a gamble component to youth asthma .In our review , Tobacco smoke was considered most more terrible gamble factor among every one of the ecological variables which severely prompted the respiratory problem like asthma in youngsters (Kamimura et al., 2022). Person that had a hereditary history of asthma unequivocally influence.8 however not all instances of Asthma were acquired ,in our review 40.4% asthmatic kids didn't found with a background marked by asthma that may be asthmatic in view of hereditary elements (Estravis et al., 2022).

A few examinations have connected anti-microbial utilization to early wheeze and asthma through immunologic feeling .Serious infection diseases, for example, respiratory syncytial infection and rhinovirus, may assume a part in diligent wheezing .Post pregnancy openness to

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

anti-toxins could improve the endanger of experience growing up asthma in early life (de Hond et al., 2022). A partner study revealed wheezing at age 4 years could be an explanation of asthma at 6 years in the event that youngsters experience rhinovirus (Menzella et al., 2022). another review related with hazard of asthma in cases kids foundconnected with respiratory diseases in adolescence and rhinovirus positive and wheezing during the earliest stages that could inclined the youngsters to asthma at age 5 years (Cabrera et al., 2022). In An examinations openness to feline was connected to a higher gamble of unfavorably susceptible sensitization.Pets at home were related with asthma in kids. Proof distinguished had a positive connection with pets in the improvement of asthma in kids, for example, openness of youngsters to felines at age of 6 years could be a gamble to create asthma.12 Another pediatric writing recognizes the more noteworthy relationship of cesarean conveyance (OR= 2.6) with asthma in kids when contrasted with vaginal birth (OR=1.3) yet its fundamental component should be more explained. It likewise distinguished the positive relationship with low birth weight (Marques and Vale, 2022). Unexpected labor and low birth weight the two variables somewhat are firmly connected with one another and with the gamble of pediatric asthma. A review exhibited that asthmatic moms were not related with untimely birth yet untimely birth was related with the improvement of asthma in kids early and later life. Unexpected labor improved the gamble of respiratory grimness in adolescence.

Universally ,Asthma causes 1 out of 169 passings among kids and its predominance has been expanding overall that normally impacts the personal satisfaction. Subsequently commonness and seriousness of asthma must be seen earnestly in childrens for early location and counteraction .Asthma is an extreme hyper receptive aviation route illness (Gholami-Mahtaj et al., 2022). Many variables are assuming their parts to impact the development of asthma among individuals including hereditary issues to natural elements and furthermore going from family ancestry to meteorological angles (Rumi et al., 2022). The primary objective of examining the gamble elements of asthma is to give early analysis and the board to diminish the gamble of future declining. Various gamble factors have been associated with creating youth asthma.Since the most recent couple of many years, asthma event and sensitivities have risen fundamentally particularly in youngsters (Starr et al., 2022).

A few factors, including repetitive wheezing, sex, atopic problems, and contaminations, have been connected to the improvement of asthma in kids .one of the most well-known reason for wheeze in youngsters is viral bronchiolitis, and in outset ,viral respiratory diseases like respiratory syncytial infection (RSV) have been connected with an expanded gamble of intermittent wheeze and asthma (Shayo, Omary, and Mugusi, 2022). Most of intense asthma assaults are brought about by viral infections.Over 90% of youngsters wheezing with RV at three years old created asthma, autonomous of the presence or absence of aeroallergen sharpening. The number as well as diligence of bronchial obstructive episodes in the initial two years of life are solid marks of possible asthma risk (Tattersall et al., 2022). The improvement of viral disease in the initial not many long stretches of life is the most diligent natural gamble of resulting young asthma.

Understanding the host-microorganism communications that impact the seriousness of respiratory contaminations would be very gainful in conceiving new and more successful

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

treatments and preventive methods (Hui et al., 2022). Maternal smoking with nicotine openness in utero connects with lung brokenness ,a significant pregnancy factor prompting chances of asthma in a youngster .Newborn children brought into the world to hypersensitive or asthmatic moms have a lack of steady maturational in Th1 cytokine age, which might assume a part in the improvement of diligent or extreme viral contaminations. It is questionable whether the presence or timing of experience growing up disease is pathogenic or defensive for the turn of events and long haul result of asthma and allergy.These discoveries underline the significance of infection actuated wheezing in deciding the probability of creating asthma sometime down the road (Nitschke et al., 2022). The improvement of viral diseases of AS and lower respiratory plot in the initial not many long periods of life is the most persevering ecological gamble of ensuing young asthma. Albeit the past explores were typically the overall portrayals of the commonness, be that as it may, no unmistakable exploration is finished on the causing risk variables of asthma. This study gauge the gamble variables of a kid to asthma in Quetta, Pakistan.This research likewise shows that the weight of respiratory sickness in youth is straightforwardly connected with the gamble of asthma.However ,It is closed from the outcomes that family background of asthma ,natural elements and self elements played critical part being developed of experience growing up asthma ..Different kind of sensitivities and asthmatic condition related with relatives would enormously expanded the gamble. This study alsohighlighted the job of air contamination in asthma commencement and its seriousness with need of hospitalization .climate changesandpet taking care of history likewise had huge relationship with adolescence asthma.Pregnancy,premature conveyance and low birth weight additionally showed relationship in the improvement of young life asthma. Kids residing with somewhere around one smoker at home was the most more awful gamble factor among every one of the ecological variables being developed of young life asthma . Breastfeeding didn't have a reasonable relationship with asthma and should be additionally investigated .Unexpected labor and low birth weight the two variables had related with the gamble of pediatric asthma. The concentrate additionally featured the need to teach the guardians about the gamble of smoking in the improvement of asthma. Children whose symptoms persist despite the correct treatment should first check whether the diagnosis of asthma is correct. Depending on the clinical signs and symptoms, it may be necessary to consider different diagnoses, make new correct diagnoses, and give different treatments. However, if a detailed reassessment confirms the diagnosis of asthma, all possible risk factors or comorbidities should be considered and, in some cases, treated to ensure maximum symptom management efforts (Wang et al., 2022). The primary reason for this study is to give a clinical outline of all asthma mimetics to consider comorbidities that might add to unfortunate control of side effects. All potential circumstances that could impersonate asthma should be thought of. A few illnesses, known as comorbidities, may coincide with an asthma finding clinical condications that show up from birth, for example, ,cystic fibrosis , essential ciliary brokenness, or immunodeficiency, e.g., everyday hack, repetitive upper respiratory plot, and lower respiratory lot demonstrates aviation route contaminations. A conclusion of extended bacterial bronchitis ought to be made on the off chance that a relentless wet hack answers long haul anti-microbial treatment (Poto, Criscuolo, Marone, Brightling, and Varricchi, 2022). Patients”experience repeating chest diseases since early on and may encounter episodes of bronchial asthma, which can prompt symptomatic vulnerability .Comparatively, respiratory side effects and confusions are a significant wellspring of dreariness and passing in people with various kinds of essential

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

immunodeficiency. An immunodeficiency condition is recognized by successive and extreme upper (e.g., sinusitis and otitis media) or lower respiratory parcel contaminations (e.g., pneumonia, bronchitis, bronchiectasis, and interstitial lung illnesses). Patients with cystic fibrosis and immunodeficiency both showed signs of inability to flourish and malabsorption. Constant asthma is perhaps of the most common structure, and it is many times unmanageable to support treatment, particularly in young kids and teenagers (Menzella et al., 2022).

Analysis is generally thought when the patient hacks more than once during the visit, particularly assuming the hack is noising and just happens during the day. Regularly, these youngsters would have gotten various treatments, including asthma meds, with no improvement in the sounding, bold hack that went on for a really long time and was in many cases brought about by a respiratory plot infectionIt is more normal in kids beyond eight years old, and it can cause unnecessary pressure for the two youngsters and the two guardians (Ryan, Keighley, and Jackson, 2022).

At long last, specialists ought to underscore that preschool wheeze or dry hack episodes ought not be utilized to analyze asthma a cold or upper respiratory in a youngster plot disease. A large number of these patients are "solid" youths who don't have wheezing or respiratory side effects when they are at school. This great clinical demeanor can assist with keeping away from overtreatment, medicalization, and parental concern. Hence, the early finding and precluding the specific gamble factors in pediatric asthma is a perplexing methodology relying on different factors that need thought to make a 100 percent progress rate.

A free connection was found between birth weight and pediatric asthma with a high gamble of predominance in African American youngsters (Khusial et al., 2022). The pervasiveness of weight and asthma had been fundamentally high in numerous nations, epidemiological concentrated on in youngsters closed a positive connection of weight record and asthma, then again, no proof was found that asthma prompts increment stoutness (Okada, Shiraishi, Tomomatsu, Oguma, and Asano, 2022),

CONCLUSION AND RECOMMENDATIONS

Conclusion

This research also supports the hypothesis that asthma is multi-factorial disease related to both familial and environmental effects. It marks the asthma as one of the challenging diseases among the others that affects the child and compromises his breath; later in life leading to further complications and discomfort.More research is needed to determine the precise role of the environment, particularly parasitic infection and atopic sensitization. Passive smoking and early weaning, on the other hand, are two major risk factors that can be reduced through public awareness and education

Recommendations

Childhood asthma is a multifactorial disease with heterogeneous clinical phenotypes and complex genetic inheritance (Ryan, Keighley, & Jackson, 2022). The main goal of analyzing the risk factors of asthma is to provide early diagnosis and achieve timely symptom management to reduce the risk of future deterioration. With the proper diagnosis of asthma, low-dose inhaled corticosteroids can easily

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

control the symptoms of most patients. If asthma does not respond to conventional treatment and a higher maintenance dose is required then it falls into the area of "problematic severe asthma".
Although the number of childhood asthma is increasing due to heightened awareness, we have recently moved from the problem of underdiagnosis to the potentially worsening condition of overdiagnosis of asthma (Tydeman et al., 2022).

REFERENCES

Alvarado-Vazquez, P. A., Cardenas, E. I., Das, A., & Hallgren, J. (2022). Depletion of Mcpt8-expressing cells reduces lung mast cells in mice with experimental asthma. *Allergy*. doi:10.1111/all.15596

Ancheta, A. J., Cunningham, P. B., Liu, J., Powell, J. S., Halliday, C. A., & Bruzzese, J. M. (2022). Asthma is Associated with Bullying Victimization in Rural Adolescents. *J Asthma*, 1-14. doi:10.1080/02770903.2022.2151466

Babayeva, M., Tabynov, K., Nurpeisov, T., Fomin, G., Renukaradhya, G. J., Petrovsky, N., & Tabynov, K. (2022). A recombinant Artemisia vulgaris pollen adjuvanted Art v 1 protein-based vaccine treats allergic rhinitis and bronchial asthma using pre- and co-seasonal ultrashort immunotherapy regimens in sensitized mice. *Front Immunol, 13*, 983621. doi:10.3389/fimmu.2022.983621

Baranski, K., & Schlunssen, V. (2022). The Accuracy of a Screening Tool in Epidemiological Studies-An Example of Exhaled Nitric Oxide in Paediatric Asthma. *Int J Environ Res Public Health, 19*(22). doi:10.3390/ijerph192214746

Batra, M., Dharmage, S. C., Newbigin, E., Tang, M., Abramson, M. J., Erbas, B., & Vicendese, D. (2022). Grass pollen exposure is associated with higher readmission rates for pediatric asthma. *Pediatr Allergy Immunol, 33*(11), e13880. doi:10.1111/pai.13880

Bickel, S., Cohen, R. T., Needleman, J. P., & Volerman, A. (2022). Appropriate Inhaler Use in Children with Asthma: Barriers and Opportunities through the Lens of the Socio-Ecological Model. *J Asthma*, 1-14. doi:10.1080/02770903.2022.2152352

Bousquet, J., Sousa-Pinto, B., Anto, J. M., Amaral, R., Brussino, L., Canonica, G. W., . . . Fonseca, J. A. (2022). Identification by cluster analysis of patients with asthma and nasal symptoms using the MASK-air(R) mHealth app. *Pulmonology*. doi:10.1016/j.pulmoe.2022.10.005

Cabrera, A., Picado, C., Barba, S., Fonseca, O., Castro, E., Garcia-Marcos, L., & Rodriguez, A. (2022). Prevalence and associated factors for asthma in adults in Quito: a cross-sectional study. *Colomb Med (Cali), 53*(2), e2025086. doi:10.25100/cm.v53i2.5086

Castilla-Martinez, M., Andujar-Espinosa, R., Flores-Martin, I., Reyes Cotes, M. H., Cabrejos-Perotti, S., Miralles-Lopez, J. C., . . . Re-Asgramur, G. (2022). Early effectivity of dupilumab in patients with t2 severe asthma: a prospective real-life study. *J Investig Allergol Clin Immunol*, 0. doi:10.18176/jiaci.0872

Cebulla, D., van Geffen, C., & Kolahian, S. (2022). The role of PGE2 and EP receptors on lung's immune and structural cells; possibilities for future asthma therapy. *Pharmacol Ther*, 108313. doi:10.1016/j.pharmthera.2022.108313

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

Chang, M. S., Yu, I., Park, S., Lee, J. H., Lee, S. J., Lee, W. Y., . . . Kim, S. H. (2022). Selection of Representative Questionnaire Items from the Asthma Control Test. *J Pers Med, 12*(11). doi:10.3390/jpm12111913

Chen, Z., Fan, N., Shen, G., & Yang, J. (2022). Silencing lncRNA CDKN2B-AS1 Alleviates Childhood Asthma Progression Through Inhibiting ZFP36 Promoter Methylation and Promoting NR4A1 Expression. *Inflammation*. doi:10.1007/s10753-022-01766-2

Chiarella, S. E., Bancos, I., & Ortega, V. E. (2022). Inhaled Corticosteroid-Induced Adrenal Suppression in Patients With Asthma Detected by Metabolomic Profiling. *J Allergy Clin Immunol Pract, 10*(10), 2774-2775. doi:10.1016/j.jaip.2022.08.004

Dasgupta, S., Ghosh, N., Bhattacharyya, P., Roy Chowdhury, S., & Chaudhury, K. (2022). Metabolomics of asthma, COPD, and asthma-COPD overlap: an overview. *Crit Rev Clin Lab Sci*, 1-18. doi:10.1080/10408363.2022.2140329

de Hond, A. A. H., Kant, I. M. J., Honkoop, P. J., Smith, A. D., Steyerberg, E. W., & Sont, J. K. (2022). Machine learning did not beat logistic regression in time series prediction for severe asthma exacerbations. *Sci Rep, 12*(1), 20363. doi:10.1038/s41598-022-24909-9

Domingo, C., Sicras-Mainar, A., Sicras-Navarro, A., Sogo, A., Mirapeix, R. M., & Engroba, C. (2022). Prevalence, T2-biomarkers and cost of severe asthma in the era of biologics: The BRAVO-1 study. *J Investig Allergol Clin Immunol*, 0. doi:10.18176/jiaci.0871

Dy, T., Hamilton, W. J., Kramer, C. B., Apter, A., Krishnan, J. A., Stout, J. W., . . . Sumino, K. (2022). Stakeholder engagement in eight comparative effectiveness trials in African Americans and Latinos with asthma. *Res Involv Engagem, 8*(1), 63. doi:10.1186/s40900-022-00399-x

Estravis, M., Perez-Pazos, J., Martin, M. J., Ramos-Gonzalez, J., Gil-Melcon, M., Martin-Garcia, C., . . . Davila, I. (2022). Quantitative and qualitative methods of evaluating response to biologics in severe asthma patients: results from a real-world study. *J Allergy Clin Immunol Pract*. doi:10.1016/j.jaip.2022.11.009

Gholami-Mahtaj, L., Mooziri, M., Bamdad, S., Mikaili, M., Jamaati, H., & Raoufy, M. R. (2022). Neural signature of attention impairment in allergic asthma: an ERP study. *Int J Neurosci*, 1-12. doi:10.1080/00207454.2022.2151908

Gu, B. H., Rim, C. Y., Lee, S., Kim, T. Y., Joo, S. S., Lee, S. J., . . . Kim, M. (2022). Alteration of Gut Immunity and Microbiome in Mixed Granulocytic Asthma. *Biomedicines, 10*(11). doi:10.3390/biomedicines10112946

Herrera-Luis, E., Forno, E., Celedon, J. C., & Pino-Yanes, M. (2022). Asthma exacerbations: the genes behind the scenes. *J Investig Allergol Clin Immunol*, 0. doi:10.18176/jiaci.0878

Hong, L., Herjan, T., Bulek, K., Xiao, J., Comhair, S. A. A., Erzurum, S. C., . . . Liu, C. (2022). Mechanisms of Corticosteroid Resistance in Type 17 Asthma. *J Immunol, 209*(10), 1860-1869. doi:10.4049/jimmunol.2200288

Honkamaki, J., Ilmarinen, P., Hisinger-Molkanen, H., Tuomisto, L. E., Andersen, H., Huhtala, H., . . . Kankaanranta, H. (2022). Nonrespiratory Diseases in Adults Without and With Asthma by Age at Asthma Diagnosis. *J Allergy Clin Immunol Pract*. doi:10.1016/j.jaip.2022.10.024

Hui, Q., Hao, Y., Ye, F., Pang, B., Niu, W., & Zhang, Q. (2022). Genetically high angiotensin-converting enzyme concentrations causally increase asthma risk: A meta-analysis using Mendelian randomization. *Front Med (Lausanne), 9*, 941944. doi:10.3389/fmed.2022.941944

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | **Email:** editor@minasij.com
Volume-02 | Issue-01 | March-2024

Kamimura, M., Inui, T., Mouri, A., Todo, H., Sugibayashi, K., & Asano, K. (2022). A Pilot Study of Transdermal Application of Diphenhydramine to the Nasal Ala in Patients with Allergic Rhinitis and Asthma. *Tokai J Exp Clin Med, 47*(4), 170-176.

Kaplan, A. G., & Kim, J. W. (2022). Asthma Exacerbations and Glucagon-Like Peptide-1 Receptor Agonists: a Review of the Current Evidence. *Pulm Ther*. doi:10.1007/s41030-022-00203-x

Khusial, R., van Koppen, S., Honkoop, P., Rijssenbeek-Nouwens, L., Fieten, K. B., Keij, S., . . . Sont, J. (2022). Patients' and Health Care Providers' Perceptions on mHealth Use After High-Altitude Climate Therapy for Severe Asthma: Mixed Methods Study. *JMIR Form Res, 6*(11), e26925. doi:10.2196/26925

Lanario, J. W., Cartwright, L., Jones, R. C., Sayers, R., Hyland, M. E., & Masoli, M. (2022). "Life-changing": the experience of super-responders to biologics in severe asthma. *BMC Pulm Med, 22*(1), 445. doi:10.1186/s12890-022-02241-2

Lee, S. Y., Kim, S., Kang, M. J., Song, K. B., Choi, E. J., Jung, S., . . . Hong, S. J. (2022). Phenotype of Atopic Dermatitis With Food Allergy Predicts Development of Childhood Asthma via Gut Wnt Signaling. *Allergy Asthma Immunol Res, 14*(6), 674-686. doi:10.4168/aair.2022.14.6.674

Li, C., Zhang, B., Yan, M., Li, Y., Chen, J., Nie, Z., . . . Chen, F. (2022). Cluster Analysis of Patients with Chronic Rhinosinusitis and Asthma after Endoscopic Sinus Surgery. *Ann Allergy Asthma Immunol*. doi:10.1016/j.anai.2022.11.013

Liao, W., Foo, H. Y. C., Tran, T. N. Q., Chai, C. L. L., & Wong, W. S. F. (2022). Calcaratarin D, a labdane diterpenoid, attenuates mouse asthma via modulating alveolar macrophage function. *Br J Pharmacol*. doi:10.1111/bph.15993

Lin, C. C., Chuang, K. C., Chen, S. W., Chao, Y. H., Yen, C. C., Yang, S. H., . . . Chen, C. M. (2022). Lactoferrin Ameliorates Ovalbumin-Induced Asthma in Mice through Reducing Dendritic-Cell-Derived Th2 Cell Responses. *Int J Mol Sci, 23*(22). doi:10.3390/ijms232214185

Liu, M., Gan, H., Lin, Y., Lin, R., Xue, M., Zhang, T., . . . Sun, B. (2022). Prevalence and Disability-Adjusted Life Year Rates of Asthma in China: Findings from the GBD Study 2019 of the G20. *Int J Environ Res Public Health, 19*(22). doi:10.3390/ijerph192214663

Lovinsky-Desir, S., & Volerman, A. (2022). Applying Lessons from the COVID-19 Pandemic to Improve Pediatric Asthma Care. *Pulm Ther*. doi:10.1007/s41030-022-00207-7

Malamardi, S., Lambert, K. A., Praveena, A. S., Anand, M. P., & Erbas, B. (2022). Time Trends of Greenspaces, Air Pollution, and Asthma Prevalence among Children and Adolescents in India. *Int J Environ Res Public Health, 19*(22). doi:10.3390/ijerph192215273

Marques, L., & Vale, N. (2022). Salbutamol in the Management of Asthma: A Review. *Int J Mol Sci, 23*(22). doi:10.3390/ijms232214207

Melen, E., Nwaru, B. I., Wiklund, F., de Fine Licht, S., Telg, G., Maslova, E., . . . Janson, C. (2022). Short-acting beta(2) -agonist use and asthma exacerbations in Swedish children: A SABINA Junior study. *Pediatr Allergy Immunol, 33*(11), e13885. doi:10.1111/pai.13885

Menzella, F., Ballarin, A., Sartor, M., Floriani, A. F., Corsi, L., Dartora, C., . . . Romagnoli, M. (2022). Comparison between clinical trials and real-world evidence studies on biologics for severe asthma. *J Int Med Res, 50*(11), 3000605221133689. doi:10.1177/03000605221133689

Mikkelsen, H., Landt, E. M., Benn, M., Nordestgaard, B. G., & Dahl, M. (2022). Causal risk factors for asthma in Mendelian randomization studies: A systematic review and meta-analysis. *Clin Transl Allergy, 12*(11), e12207. doi:10.1002/clt2.12207

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | Email: editor@minasij.com
Volume-02 | Issue-01 | March-2024

Mohkam, M., Golkar, N., Nabavizadeh, S. H., Esmaeilzadeh, H., Berenjian, A., Ghahramani, Z., . . . Alyasin, S. (2022). In Silico Evaluation of Nonsynonymous SNPs in Human ADAM33: The Most Common Form of Genetic Association to Asthma Susceptibility. *Comput Math Methods Med, 2022*, 1089722. doi:10.1155/2022/1089722

Murphy, R. C., Morrell, E. D., & Hallstrand, T. S. (2022). The Intersection Between Autoimmunity, Macrophage Dysfunction, Endotype and Exacerbations in Severe Asthma. *Am J Respir Crit Care Med*. doi:10.1164/rccm.202211-2074ED

Musiol, S., Harris, C. P., Karlina, R., Gostner, J. M., Rathkolb, B., Schnautz, B., . . . Alessandrini, F. (2022). Dietary digestible carbohydrates are associated with higher prevalence of asthma in humans and with aggravated lung allergic inflammation in mice. *Allergy*. doi:10.1111/all.15589

Nagayama, K., Fukutomi, Y., Nakatani, E., Hamada, Y., Irie, M., Azekawa, K., . . . Taniguchi, M. (2022). Longitudinal changes in the prevalence of adult asthma: An epidemiological survey among Japanese salaried employees and their dependents using healthcare insurance claim from 1999 to 2019. *Allergol Int*. doi:10.1016/j.alit.2022.11.002

Nair, A. A., Vimala, L. R., Chandran, D., & Gupta, R. (2022). ABPA sans asthma: an entity to remember. *BMJ Case Rep, 15*(11). doi:10.1136/bcr-2022-252658

Nitschke, M., Dear, K. B. G., Venugopal, K., Lyne, K. M. R., Jersmann, H. P. A., Simon, D. L., & Spurrier, N. (2022). Association between grass, tree and weed pollen and asthma health outcomes in Adelaide, South Australia: a time series regression analysis. *BMJ Open, 12*(11), e066851. doi:10.1136/bmjopen-2022-066851

Okada, N., Shiraishi, Y., Tomomatsu, K., Oguma, T., & Asano, K. (2022). Moldy odor from air conditioners in the residences of Japanese participants with and without asthma. *Indoor Air, 32*(11), e13156. doi:10.1111/ina.13156

Onubogu, U. C., & Ayuk, A. (2022). Pulse oximetry and peak expiratory flow rate correlations in acute asthma exacerbation in children. *Niger J Clin Pract, 25*(11), 1896-1903. doi:10.4103/njcp.njcp_376_22

Poto, R., Criscuolo, G., Marone, G., Brightling, C. E., & Varricchi, G. (2022). Human Lung Mast Cells: Therapeutic Implications in Asthma. *Int J Mol Sci, 23*(22). doi:10.3390/ijms232214466

Qian, X. J., Hu, X. T., & Jiang, P. (2022). Exploration of the Efficacy of Anti-Immunoglobulin E Monoclonal Antibodies in the Treatment of Allergic Asthma. *Immunology*. doi:10.1111/imm.13613

Reyes-Angel, J., Han, Y. Y., Forno, E., Celedon, J. C., & Rosser, F. J. (2022). Parental knowledge and usage of air quality in childhood asthma management. *Front Pediatr, 10*, 966372. doi:10.3389/fped.2022.966372

Romero-Mesones, C., Ojanguren, I., Espejo, D., Granados, G., Gonzalez-Barcala, F. J., Cruz, M. J., & Munoz, X. (2022). Influence of the environment on the characteristics of asthma. *Sci Rep, 12*(1), 20522. doi:10.1038/s41598-022-25028-1

Rosenquist, N. A., Richards, M., Ferber, J. R., Li, D. K., Ryu, S. Y., Burkin, H., . . . Darrow, L. A. (2022). Prepregnancy Body Mass Index and Risk of Childhood Asthma. *Allergy*. doi:10.1111/all.15598

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | **Email:** editor@minasij.com
Volume-02 | Issue-01 | March-2024

Rosman, Y., Hornik-Lurie, T., Meir-Shafrir, K., Lachover-Roth, I., Cohen-Engler, A., & Confino-Cohen, R. (2022). The effect of asthma specialist intervention on asthma control among adults. *World Allergy Organ J, 15*(11), 100712. doi:10.1016/j.waojou.2022.100712

Rumi, G., Canonica, G. W., Foster, J. M., Chavannes, N. H., Valenti, G., Contiguglia, R., . . . Braido, F. (2022). Correction: Digital Coaching Using Smart Inhaler Technology to Improve Asthma Management in Patients With Asthma in Italy: Community-Based Study. *JMIR Mhealth Uhealth, 10*(11), e44532. doi:10.2196/44532

Ryan, D., Keighley, A., & Jackson, T. (2022). Patient perspectives in asthma: Listening to and learning from a new paradigm in translational research. *Respir Med, 205*, 107013. doi:10.1016/j.rmed.2022.107013

Shamshad, T., Khalique, N., Shameem, M., Shah, M. S., & Nawab, T. (2022). Prevalence of bronchial asthma in school going children: A cross-sectional study from Uttar Pradesh. *Indian J Public Health, 66*(Supplement), S22-S26. doi:10.4103/ijph.ijph_1067_22

Shayo, G. A., Omary, A., & Mugusi, F. (2022). Inhaler Non-Adherence, Associated Factors and Asthma Control among Asthma Patients in a Tertiary Level Hospital in Tanzania. *East Afr Health Res J, 6*(1), 78-85. doi:10.24248/eahrj.v6i1.682

Sipowicz, K., Podlecka, M., Mokros, L., Pietras, T., & Luczynska, K. (2022). The feeling of loneliness and the sense of meaning in life in patients with various levels of bronchial asthma control. *J Asthma*, 1-10. doi:10.1080/02770903.2022.2151465

Starr, S., Wysocki, M., DeLeon, J. D., Silverstein, G., Arcoleo, K., Rastogi, D., & Feldman, J. M. (2022). Obesity-related pediatric asthma: relationships between pulmonary function and clinical outcomes. *J Asthma*, 1-14. doi:10.1080/02770903.2022.2152351

Tabberer, M., Wells, J. R., Chandler, D., Abetz-Webb, L., Zhang, S., Meeraus, W., . . . Slade, D. (2022). Patient experience of moderate asthma attacks: qualitative research in the USA and Germany. *J Patient Rep Outcomes, 6*(1), 117. doi:10.1186/s41687-022-00506-2

Tattersall, M. C., Dasiewicz, A. S., McClelland, R. L., Jarjour, N. N., Korcarz, C. E., Mitchell, C. C., . . . Stein, J. H. (2022). Persistent Asthma Is Associated With Carotid Plaque in MESA. *J Am Heart Assoc*, e026644. doi:10.1161/JAHA.122.026644

Torres-Duque, C. A., Ocampo-Gomez, J., Castillo, M. M., Cano-Rosales, D., Giraldo-Montoya, A., Rodriguez, F., . . . Consortium, R. (2022). Real-world effectiveness of omalizumab for severe allergic asthma treatment in Colombia. *BMC Pulm Med, 22*(1), 447. doi:10.1186/s12890-022-02246-x

Tydeman, F., Pfeffer, P. E., Vivaldi, G., Holt, H., Talaei, M., Jolliffe, D., . . . Martineau, A. R. (2022). Rebound in asthma exacerbations following relaxation of COVID-19 restrictions: a longitudinal population-based study (COVIDENCE UK). *Thorax*. doi:10.1136/thorax-2022-219591

Wang, Y., Dong, X., Pan, C., Zhu, C., Qi, H., Wang, Y., . . . Xie, Y. (2022). Single-cell transcriptomic characterization reveals the landscape of airway remodeling and inflammation in a cynomolgus monkey model of asthma. *Front Immunol, 13*, 1040442. doi:10.3389/fimmu.2022.1040442

Wu, Y., Di, X., Zhao, M., Li, H., Bai, L., & Wang, K. (2022). The role of the NLRP3 inflammasome in chronic inflammation in asthma and chronic obstructive pulmonary disease. *Immun Inflamm Dis, 10*(12), e750. doi:10.1002/iid3.750

Logical Creations Education Research Institute
MADER E MILAT INTERNATIONAL JOURNAL OF NURSING AND ALLIED SCIENCES
E-ISSN: 2960-2181
Web: www.minasij.com | **Email:** editor@minasij.com
Volume-02 | Issue-01 | March-2024

Wypych-Slusarska, A., Krupa-Kotara, K., & Niewiadomska, E. (2022). Social Inequalities: Do They Matter in Asthma, Bronchitis, and Respiratory Symptoms in Children? *Int J Environ Res Public Health, 19*(22). doi:10.3390/ijerph192215366

Yu, J. (2022). Which Subtype of Atopic Dermatitis Progresses to Asthma? A Story About Allergic March. *Allergy Asthma Immunol Res, 14*(6), 585-586. doi:10.4168/aair.2022.14.6.585

Zheng, J., Yue, L., Wang, B., Li, Y., Zhang, L., Xue, B., . . . Luo, B. (2022). Seasonal characteristics of ambient temperature variation (DTR, TCN, and TV(0-t)) and air pollutants on childhood asthma attack in a dry and cold city in China. *Environ Res*, 114872. doi:10.1016/j.envres.2022.114872

Zoumot, Z., Al Busaidi, N., Tashkandi, W., Aljohaney, A. A., Isse, S., Vidyasagar, K., & Ukwaja, K. N. (2022). Tezepelumab for Patients with Severe Uncontrolled Asthma: A Systematic Review and Meta-Analysis. *J Asthma Allergy, 15*, 1665-1679. doi:10.2147/JAA.S378062

Zuo, X., Guo, X., Gu, Y., Zheng, H., Zhou, Z., Wang, X., . . . Wang, F. (2022). Recent Advances in Nanomaterials for Asthma Treatment. *Int J Mol Sci, 23*(22). doi:10.3390/ijms232214427